

94 65. (Amended) A nonaqueous electrolyte secondary cell comprising a negative electrode incorporating a carbon material therein as an active substance, the carbon material comprising a first carbon material serving as an inner core particle having an outer surface, and a coating of a second carbon material on said outer surface of the first carbon material, the second carbon material containing boron and nitrogen.

REMARKS

The claims have been amended to precisely recite that the carbon material of the present invention comprises a first carbon material serving as an inner core particle having an outer surface, and a coating of a second carbon material on the outer surface of the first carbon material. This recitation is believed to be supported throughout the specification disclosure and, particularly, by the description of the first carbon material as preferably being a graphite particles. (See, for example, page 10, lines 3-8 from the bottom of the page).

The objection and rejections set forth in the present action are discussed below with reference to the headings used in the action.

***Drawings***

The drawings are objected to under 37 C.F.R. §1.83(a). The examiner is requiring a drawing of the carbon material of the present invention. This requirement appears to be related to the 35 U.S.C. § 112 rejection (discussed below) in which the examiner has taken the position that the terminology "core material" recited in the claims is not clear because the core material can be an inner core or an outer core.

The claims have been amended, as noted above, and are believed to avoid the 35 U.S.C. § 112 rejection. It is clear from the amended claims that the carbon material of the present invention is an inner core particle of a first carbon material having a second carbon material coated on the outer surface thereof. It is respectfully submitted that a drawing is not required for an understanding of the invention as recited in the amended claims

(see 37 C.F.R. § 1.81(a)) and that the nature of the invention does not admit of illustration by a drawing (see 37 C.F.R. § 1.81(c)). Removal of the requirement for a drawing of the carbon material, therefore, is respectfully requested.

***Claim Rejections - 35 U.S.C. §112***

Claims 1-80 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The limitation "the surface thereof" is stated to have insufficient antecedent basis. The examiner is suggesting that the core material can have an inner or outer surface and that it is not clear from the claim which surface is intended.

The examiner's position appears to be based on an interpretation of the terminology "core material" recited in the original claims as including both inner cores and outer cores. This interpretation, in turn, appears to be based on the examiner's understanding of the disclosure of the Kawakami et al. reference, U.S. Patent No. 5,702,845 ("Kawakami"), cited in the prior art grounds of rejection (discussed below). Kawakami discloses a

porous hollow particle which can have a conductive material provided in the hollow. Applicants believe that the examiner considers the porous hollow particle of Kawakami to be an outer core.

Initially, it is noted for the record that applicants do not believe that the examiner's interpretation of the terminology "core material" as including both inner cores and outer cores is reasonable. The common dictionary meaning of the term "core" is "an innermost material." A core cannot be an outer core. Notwithstanding that the term core cannot properly be interpreted as including inner cores and outer cores, the claims have been amended to recite an inner core particle having an outer surface. Such terminology is believed to exclude "outer" core particles and to avoid the indefiniteness issues.

***Claim Rejections - 35 U.S.C. §102/35 U.S.C. §103***

The claims are rejected under 35 U.S.C. §102(b) over the Kawakami reference and under 35 U.S.C. § 103(a) over the Kawakami reference, alone, or in combination with Takami et al., U.S. Patent

No. 5,795,678, or Tamaki et al., U.S. Patent No. 5,698,341. It is believed that all of the rejections are based on a position of the examiner that the carbon material of the present invention is anticipated by the disclosure of Kawakami.

As noted above, the claims have been amended to define the carbon material of the invention as an inner core particle having an outer surface and a coating of the second carbon material provided on the outer surface. The claims as amended distinguish over the porous hollow structures of Kawakami. The porous hollow structures of Kawakami are not [inner] core particles and do not have a coating of a second carbon material (containing boron or containing boron and nitrogen) on the outer surface of the core particles. The conductive material 104 (refer to Fig. 3 of Kawakami) provided in the porous hollow structures is not an inner core particle. Moreover, the conductive material 104 provided inside the hollow section 102 of the porous hollow structures of Kawakami is prepared by using a conductive powder such as metal powder and not a carbon material. Therefore, the suggestion in the action that the conductive material 104 provided inside the hollow

section 102 in Kawakami corresponds to the second carbon material of the present invention is not correct.

It is also noted that the secondary Takami and Tamaki references have been cited only as disclosing the lattice spacings of carbon materials recited in the dependent claims. Thus, these references do not overcome [and have not been cited as overcoming] the insufficiencies of the Kawakami reference.

Removal of the 35 U.S.C. § 102 and 35 U.S.C. § 103(a) rejections is believed to be in order and is respectfully solicited.

The foregoing is believed to be a complete and proper response to the Office Action dated January 16, 2002, and is believed to place this application in condition for allowance. If, however, minor issues remain that can be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number indicated below.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attachment is captioned **"VERSION WITH MARKINGS TO SHOW CHANGES MADE."**

PATENT APPLN. NO. 09/576,211  
RESPONSE UNDER 37 C.F.R. § 1.111

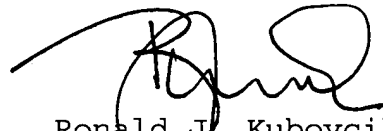
**PATENT**  
**NON-FINAL**

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of time. The fee for any such extension may be charged to our Deposit Account No. 111833.

In the event any additional fees are required, please also charge our Deposit Account No. 111833.

Respectfully submitted,

KUBOVCIK & KUBOVCIK

A handwritten signature in black ink, appearing to read 'Ronald J. Kubovcik', is written over the printed name.

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 1, 12, 27, 38, 53 and 65 have been amended as follows:

1. (Amended) A carbon material comprising a first carbon material serving as [a] an inner core [material] particle having an outer surface, and a coating of a second carbon material [coating] on said outer surface of the first carbon material [~~over the surface thereof~~], the second carbon material containing boron.

12. (Amended) A carbon material comprising a first carbon material serving as [a] an inner core [material] particle having an outer surface, and a coating of a second carbon material [coating] on said outer surface of the first carbon material [~~over the surface thereof~~], the second carbon material containing boron and nitrogen.



27. (Amended) An electrode comprising a carbon material used as an active substance, the carbon material comprising a first carbon material serving as [a] an inner core [material] particle having an outer surface, and a coating of a second carbon material [coating] on said outer surface of the first carbon material [over the surface thereof], the second carbon material containing boron.

38. (Amended) An electrode comprising a carbon material used as an active substance, the carbon material comprising a first carbon material serving as [a] an inner core [material] particle having an outer surface, and a coating of a second carbon material [coating] on said outer surface of the first carbon material [over the surface thereof], the second carbon material containing boron and nitrogen.

53. (Amended) A nonaqueous electrolyte secondary cell comprising a negative electrode incorporating a carbon material therein as an active substance, the carbon material comprising a first carbon material serving as [a] an inner core [material]

particle having an outer surface, and a coating of a second carbon material ~~[coating]~~ on said outer surface of the first carbon material ~~[over the surface thereof]~~, the second carbon material containing boron.

65. (Amended) A nonaqueous electrolyte secondary cell comprising a negative electrode incorporating a carbon material therein as an active substance, the carbon material comprising a first carbon material serving as [a] an inner core ~~[material]~~ particle having an outer surface, and a coating of a second carbon material ~~[coating]~~ on said outer surface of the first carbon material ~~[over the surface thereof]~~, the second carbon material containing boron and nitrogen.